

ABSTRACT

A CsX:Eu phosphor produced by heating a cesium halide with a Europium compound containing one or more halides selected from the group consisting of F, Cl, Br and I. Preferably the Europium compound is selected from the group consisting of EuX'_2 , EuX'_3 and EuOX' , X' being one or more halides selected from the group consisting of F, Cl, Br and I. The invention also includes novel phosphors having properties inherent to the manufacturing process as well as other phosphors containing a mixture of Br and Cl in the cesium halide, europium doped phosphor.

A method for preparing a binderless phosphor screen using these phosphors and a method for recording and reproducing an X-ray image using such screens are also disclosed